

### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (Currently Amended) A computer implemented method of automatically reloading a page on a client computing device, the computer implemented method comprising:

storing the [[a]] page on a server;

transmitting a copy of the page to a browser of the client computing device in response to a request from said browser received at said server, said copy of the page being transmitted to the browser over a network connecting the client computing device to the server;

responsive to receiving a real-time notification that the server is updating [[the]] content of the page stored on the server, determining , by a message broker, whether a change message is to be communicated to the browser, based on a user selected list of network addresses for the client computing device registered with the message broker, wherein the user selected list of network addresses comprises a plurality of network addresses of pages to be automatically maintained in an updated form, wherein the user selected list of network addresses comprises a user selected subset of a list of bookmarks stored in said browser; and

transmitting the change message to said browser in real-time, by the message broker, in response to the message broker determining that a [[the]] network address of the page is registered in the user selected list of network addresses for the client computing device, wherein the change message notifies the browser of a change in the content of the page, wherein said browser automatically requests a copy of the updated page, and wherein the page comprises a hidden applet, wherein the hidden applet is used to reload the page, responsive to receiving the change message.

2. (Currently Amended) The computer implemented of claim 1, wherein the change message is generated by an application implementable by the server, wherein the server is an application server.

3. (Currently Amended) The computer implemented of claim 1, wherein the message broker is located on the application server ~~is an application server.~~

4. (Previously Presented) The computer implemented method of claim 1, wherein the message broker is located on a message broker server.

5. (Currently Amended) The computer implemented method of claim 4 [[1]] wherein the message broker server comprises a publish/subscribe engine and wherein ~~in that~~ the change message is communicated to the browser using a socket transport protocol.

6. (Currently Amended) The computer implemented method of claim 1 further comprising:  
registering the user selected list of network addresses with the message broker, wherein the user selected list of network addresses comprises a set of network addresses belonging to a set of pages, whereby the set of pages are automatically updated,

registering with a message broker agent/server a network address of a page, by the browser; and determining, by the message broker agent/server, on the basis of said registered network page address, whether a received change message is to be communicated to the browser.

7. (Currently Amended) The computer implemented method of claim 1, wherein the page is stored in a cache on the client computing device, further comprising:

registering, with the message broker agent/server, a plurality of network addresses for pages which are used by the message broker agent/server to determine if a received change message is to be communicated to the browser.

8-9. (Canceled)

10. (Currently Amended) The computer implemented method of claim 1, wherein a push client agent is part of the browser, wherein the push client agent receives the change message, wherein the change message comprises a unique network address for a page from the user selected list of network addresses, and wherein the push client agent tells the browser to load the unique network address specified in the change message, the user selected list of network addresses comprise a user selected subset of the browser bookmark list.

11. (Currently Amended) The computer implemented method of claim 10 [[1]], wherein the hidden applet operates as the push client agent, the browser comprises a program code for causing said browser to automatically request a copy of the updated page upon receipt of the change message.

12. (Currently Amended) The computer implemented method of claim 11 wherein the program code for the push client agent causing said browser to automatically request a copy of the updated page upon receipt of the change message is downloaded from the message broker agent/server.

13. (Currently Amended) The computer implemented method of claim 1, wherein the content of the page comprises data regarding text, instructions, structure, layout, physical format, links, and media objects for the page a program code for causing said browser to automatically request a copy of the updated page upon receipt of the change message, and wherein the program code comprises a Java applet embedded in the page.

14. (Currently Amended) The computer implemented method of claim 13 wherein the content comprises user specific data from a user's account, wherein the user specific data is provided from a private network connected to the server, ~~the browser embeds the Java applet into subsequently downloaded pages from a same website.~~

15-23. (Canceled)

24. (Currently Amended) The computer implemented method of claim 13, wherein the page is configured as a hyper-text markup language file. A computer implemented method of automatically reloading a page on a client computing device, the computer implemented method comprising:  
registering a user selected list of network addresses with a message broker server, wherein the user selected list of network devices comprises a network address of a page that is to be automatically updated;

receiving a change message from the message broker server, wherein the change message provides a real-time notification of a change in content for the page to the client computing device, wherein the page is stored in cache on the client computing device, wherein an address of the page is included in the user selected list of network addresses registered with the message broker server; and

responsive to receiving the change message, requesting an updated copy of the page from an application server, by a push client agent on the client computing device, wherein the page is automatically reloaded in a page update procedure without any activity required by a user to initiate the page update procedure.

25. (Currently Amended) The computer implemented method of claim 1 [[24]], further comprising:  
responsive to receiving the change message when the page is being currently displayed to the user, reloading the page that is being currently displayed to the user as an updated copy of the page,  
wherein the push client agent is part of the browser.

26. (Currently Amended) The computer implemented method of claim 1 [[24]] wherein the user selected list of network addresses comprises a set of universal resource locator (URL) addresses for locating the user selected list of network addresses on the Internet -push client agent is a Java applet embedded in the page.

27. (Currently Amended) A data processing system for computer implemented method of automatically reloading a page on a client computing device, the data processing system computer implemented method comprising:

a server, wherein the page is stored on the server;

a network;

a client computing device, wherein the client computing device is connected to the server over the network, wherein the client computing device comprises a processing unit, wherein the processing unit executes a set of instructions;

to transmit a copy of the page to a browser of the client computing device in response to a request from said browser received at said server, said copy of the page being transmitted to the browser over the network connecting the client computing device to the server;

to determine by a message broker whether a change message is to be communicated to the browser, based on a user selected list of network addresses for the client computing device registered with the message broker, wherein the user selected list of network addresses comprises a plurality of network addresses of pages to be automatically maintained in an updated form, wherein the user selected list of network addresses comprises a user selected subset of a list of bookmarks stored in said browser, responsive to receiving a real-time notification that the server is updating content of the page stored on the server; and

to transmit the change message to said browser in real-time, by the message broker, in response to the message broker determining that a network address of the page is registered in the user selected list of network addresses for the client computing device, wherein the change message notifies the browser of a change in the content of the page, wherein said browser automatically requests a copy of the updated page, and wherein the page comprises a hidden applet, wherein the hidden applet is used to reload the page, responsive to receiving the change message,

storing a page on an application server;

transmitting a copy of the page to a browser of the client computing device in response to a request from the browser received at the application server, said copy of the page being transmitted to the browser over a network connecting the client computing device to the server;

responsive to receiving a real-time notification that the application server is updating the content of the page stored on the server, determining, by a message broker on a message broker server, whether a change message is to be communicated to the browser, based on a user selected list of network addresses for the client registered with the message broker, wherein the user selected list of network addresses comprises a plurality of network addresses of pages to be automatically maintained in an updated form; wherein the user selected list of network addresses comprise a user selected subset of the browser bookmark list; and wherein the message broker server comprises a publish/subscribe engine; and transmitting the change message to the browser in real-time, by the message broker, in response to the message broker determining that the network address of the page is registered in the list of network addresses for the client computing device, wherein the change message notifies the browser of a change in the content of the page, wherein the browser automatically requests a copy of the updated page, wherein the browser comprises a program code for causing the browser to automatically request a copy of the updated page upon receipt of the change message.

28. (New) A computer program product stored on a recordable-type computer readable medium for automatically reloading a page on a client computing device, the computer program product comprising:
  - computer usable program code for storing the page on a server;
  - computer usable program code for transmitting a copy of the page to a browser of the client computing device in response to a request from said browser received at said server, said copy of the page being transmitted to the browser over a network connecting the client computing device to the server;
  - computer usable program code for responsive to receiving a real-time notification that the server is updating content of the page stored on the server, determining, by a message broker, whether a change message is to be communicated to the browser, based on a user selected list of network addresses for the client computing device registered with the message broker, wherein the user selected list of network addresses comprises a plurality of network addresses of pages to be automatically maintained in an updated form, wherein the user selected list of network addresses comprises a user selected subset of a list of bookmarks stored in said browser; and
  - computer usable program code for transmitting the change message to said browser in real-time, by the message broker, in response to the message broker determining that a network address of the page is registered in the user selected list of network addresses for the client computing device, wherein the change message notifies the browser of a change in the content of the page, wherein said browser automatically requests a copy of the updated page, and wherein the page comprises a hidden applet, wherein the hidden applet is used to reload the page, responsive to receiving the change message.